

Hydraulic Crawler Crane SC-65







excellent fuel efficiency, all through advanced electronic control, precision fuel delivery, and refined air management.

New ergonomic cabin

New Cab designed to be spacious, guite and comfortable for the operator, assuring high productivity throughout the working day. Operator controls are conveniently located for easy access. For more details see page 17.

Control system

The DMS (Drilling Mate System) controls and monitors the operation of the machine (see page 18). With the new electric-hydraulic proportional control, the machine can perform more functions at the same time. A dedicated power module electronic control system ensures that the main hydraulic pumps and diesel engine work at maximum efficiency and productivity.

Winches with high line pull

Free fall winches with high performances even in the most demanding conditions. Nominal line pull at 1st layer = 240 kN; max rope speed = 87 m/min.

Passive protection (handrails and guards)

Handrails on rooftop protect against possible falls of maintenance people staff (FOPS compliant). Overhead and windshield guards (removable in case of emergency) protect from material falling from falling objects. The exterior design uses thick steel tubing along the bottom perimeter of the cabin, improving the resistance to fatigue and vibration

Quick assembly and efficient transport

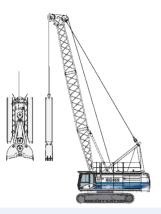
Counterweight with a self-handling system (service crane not required). Crawlers can be retracted to respect 3 meters wide in transport. Transport weight less than 50 ton. Removable tracks available to reduce transport weight under 35 tonnes.

The Soilmec advantage

- A real multifunctional machine, designed from scratch to give you the best drilling solution.
- · Long life expectancy with a high residual value.
- Best price/performance ratio.
- · Built with the customer in mind.



WORKING CONFIGURATIONS

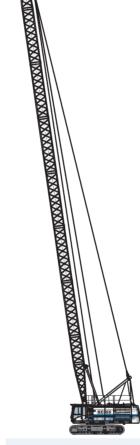


SC-65 for diaphragm walls with DW grab

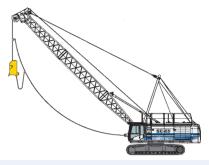
SC-65 for bored piles

with casing oscillator

and hammer grab



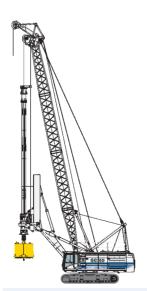
SC-65 for lifting with crane equipment



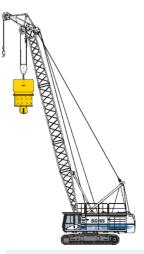
SC-65 for material excavation with dragline



SC-65 for material handling with clamshell

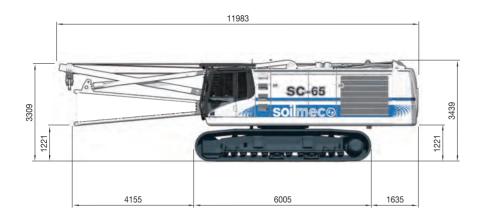


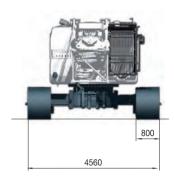
SC-65 for bored piles with hydraulic or mechanical rotary



SC-65 for driving profiles with vibratory drivers

TECHNICAL SPECIFICATIONS





DIESEL ENGINE

	Model	CATERPILLAR C15 with ACERT ™ Technology	
	Max Rated Power	403 kW @ 1800 rpm	540 HP @ 1800 rpm
Marie de la Contraction de la	Displacement	15,2 liters	4.02 US gal
	Number of cylinders and Arrangement	6 in line	
	Aspiration	Turbocharged, air to air aftercooled	
	Cooling	Water-cooled	
	Electric system	24 V	
	Emissions	C15 meets EU 97/68/EC Stage IIIA	
		and EPA/CARB Tier 3 directives	

HYDRAULIC SYSTEM



Main pumps Caterpillar CXP Heavy Duty Pump - 250 cc with ESP Control:

- Variable displacement axial piston pumps for open circuits
- Flow is proportional to drive speed and is infinitely variable (oil supplied only when necessary)
- Output flow increases with swash plate angle from 0° to its maximum value

Pumps are driven by electro-hydraulic control 24V via Caterpillar ECM.

All function can be driven simultaneously.

Service pumps dedicated for swing, counterweight lifting, lower drive, fans, etc.

Additional hydraulic kits are available for: winch syncronisation, casing oscillator, hydraulic rotary, both positive and negative brake system. The use of synthetic environmentally friendly oil is possible.

Power module control system

The system provides all required hardware (Electronic control module, sensor hardware etc) and software to ensure that hydraulic pumps and Caterpillar Diesel engine work at their most efficient and productive levels. The custom control system software offers many features including: engine underspeed control, hydraulic power limiting, fully variable pump power distribution control, and comprehensive hydraulic system monitoring and broadcast.

MACHINE CONTROL SYSTEM



The Soilmec proprietary **Control System** installed on SC-65 is electric-hydraulic proportional allowing control and coordination of machine functions; movements can be performed simultaneously.

This redundant PLC system guarantees, in case of failure, no impact on machine availability (operator will be informed, through the touch panel display, about the specific problem).

The Switch Can Open allows a quick trouble shouting in electric connections.

The software can be customized with functions dedicated to specific attachment (e.g.: winch syncronismus for cable grab). The associated **Monitoring System** provides following main features

- warning recording, failure detection, maintenance management;
- interface with power module control system;
- job site data processing and production data report;
- remote control and real time assistance on the machine.

TECHNICAL SPECIFICATIONS

Interfaces with operator:

Two pedals for crawler control and two pedals for free fall winch control.

High definition LCD monitor.

Keyboards with different buttons.

Two multi-directional joysticks configurable according different working functions: hydraulic cable excavator configuration (left joystick for boom winch and swing; right doubleT-joystick for front and rear winch); crane configuration (left joystick for boom winch and rear winch; right joystick for swing and front winch); for rotary configuration other 2 joysticks are installed in the cab.

MAIN WINCHES

	Winch type	SF	-140	SI	F240	SV	/260
	Drum grooved type	Le	ebus	Le	ebus	Le	bus
	Line pull (nominal load)	140 kN	31474 lb _f	240 kN	53955 lb _f	260 kN	58451 lb _f
3	Rope diameter	26 mm	1.02 in	30 mm	1.18 in	30 mm	1.18 in
	Rope speed	106 m/min	348 ft/min	87 m/min	286 ft/min	85 m/min	279 ft/min
	Rope capacity 1st layer	38 m	125 ft	44 m	145 ft	40 m	132 ft

Options: Auxiliary winch (line pull: 70 kN); Tagline winch (line pull: 30 kN).

Main features: compact design, rigid winch construction, high efficiency, long work life cycle.

Every winch is controlled independently by a variable flow hydraulic motor, with pressure controlled, to guarantee best regulation of line speed and line pull. Measuring pump and free fall valve allow to automatically adjust oil flow providing maximum line speed depending on load.

The input and output drives are protected against oil leakage and ingress of dirt or water by radial shaft sealing rings.

BOOM HOIST

<u></u>	Winch line pull	2x57 kN	2x12815 lb _f
V. FV	Winch rope diameter	16 mm	0.63 in

Boom winch: twin drum driven by hydraulic motor and planetary gearbox. Brake with hydraulically operated multiple-disc system

SWING

	Swing bearing	Double-row ball type with external teeth
	Swing drives	Type: planetary 2 stages
\$		Hydraulic motor: fixed displacement piston
		Swing brake type: multiple disc
	Swing speed	from 0-4.5 rpm (continuously variable, selector for 3 speed ranges to increase swing precision).

Swing unit is powered by 2 hydraulic piston motors (swing drives) through planetary gearbox and pinion.

UNDERCARRIAGE

	Track shoes type	Triple grouser or flat	
	Travel speed	1,2 - 1,8 km/h 0.74	- 1.12 mph
	Max. gradeability (empty)	0,683	
	Track shoe width	800 mm	31.5 in

Variable gauge lower (from 3000 to 4560 mm) with hydraulically actuated track frames which gives the flexibility to change the gauge from the cab for maximum stability or to reduce machine width for transport. The lower design accommodates most track shoe widths. Removable sides available as option.

Drive system: higher travel speed provided by two-speed axial piston hydraulic motors, with planetary reduction gearbox and motion control valve integrated on motors.

Parking brake: multi-disc brake, spring loaded.

SERVICE REFILL CAPACITIES

		7 T T T T T T T T T T T T T T T T T T T			
ľ		Fuel Tank	850 I	225 US gal	
		Cooling System	100 I	27 US gal	
	J	Diesel engine oil	65 I	17 US gal	
		Hydraulic Tank	990 I	262 US gal	

NOISE EMISSION



Noise emissions correspond with 2000/14/EC directive on noise emission by equipment used outdoors.

Soilmec integrates high quality level components: Caterpillar, Rothe erde, Trasmital, Zollern, Rexroth, Berco.

STANDARD EQUIPMENT

Base machine

- High capacity batteries for low temperature
- Alternator (95 A)
- PLC system for electric-hydraulic controls
- 800 shoe crawlers
- Steps for crawlers
- Tracks with chain tensioning device
- · Grease lubricated tracks
- · Automatic swing parking brake
- · Automatic travel parking brake
- Two front working lights
- · Rear view mirror
- · Counterweight self-removal
- Swivel for main rope
- Hydro-clean micro filtration with water separation
- Electric refuelling pumps for diesel and hydraulic oil with automatic stop system

Cab/ Control

- Air conditioner, heater and defroster with automatic climate control
- Beverage/Cup holder
- Radio and CD player
- · High brightness led internal to the cab
- · Courtesy lights in the cab
- Signal/warning horn
- Floor mat
- Lockable glove compartment
- · Retracted seat belt
- Stationary skylight
- Sunshade for windshield
- Travel control pedals with removable hand levers
- Parallelogram wiper including a washer nozzle mounted below the cab windshield
- Warning in cab of hydraulic oil contamination
- Temperated safety glass panel
- Armrests

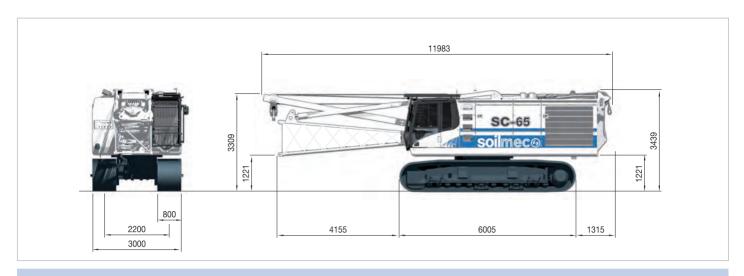
Safety device

- LCD cameras monitor multi-display
- Fire extinguisher
- Cab top guard (foes compliance)
- Catwalk (on side and in front of operator's cab)
- Depthmeter on both main winches
- State-of-the-art safety load indicator with graphic display
- Load limit switch
- · Hoist limit switch on both main winches
- Rope limit switch

ADDITIONAL EQUIPMENT OPTIONS

- Track triple grouser: 700 mm, 900 mm
- Flat track shoes
- Removable tracks
- Windshield guards
- Reversible cooling fan including protective screen
- Bio lubrication engine oil
- "CAT BIO HYD ADVANCED" hydraulic bio-oil (compliant with European directive 2005/360/EC).
- GSM modem
- Hydraulic arrangement for Casing oscillator attachment
- Positive or negative free fall controls
- Satellite system for remote transmission of operating data
- Electric hand throttle
- · Auxiliary winch
- Tagline winch
- Automatic lubrication system
- Winch synchronisation
- Potentiometer to tune the load between main winches during 2-rope grab operation
- Three color percentage indicator
- Swing and travel alarms
- Lights for overall dimensions
- Double T-joystick for cable excavator configurations

TRANSPORT DIMENSIONS AND WEIGHTS



Base machine

with boom foot, wire ropes, without basic counterweight



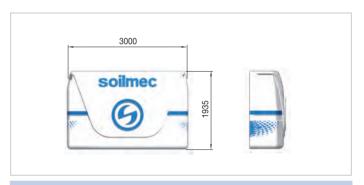
Side frame

 Width
 6005 mm
 236.6 in

 Weight
 8750 kg
 19290 lb

 Width
 3000 mm
 118.2 in

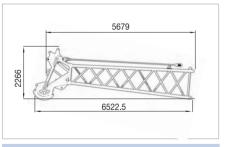
 Weight
 49000 kg
 108025 lb



Counterweight

 Width
 3000 mm
 118.2 in

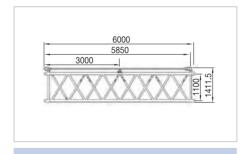
 Weight
 17650 kg
 38911 lb



Boom head

 Width
 2260 mm
 89 in

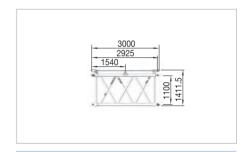
 Weight
 1600 kg
 3527 lb



Boom insert (6m)

 Width
 1410 mm
 55.6 in

 Weight
 750 kg
 1653 lb

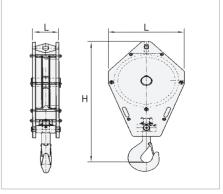


Boom insert (3m)

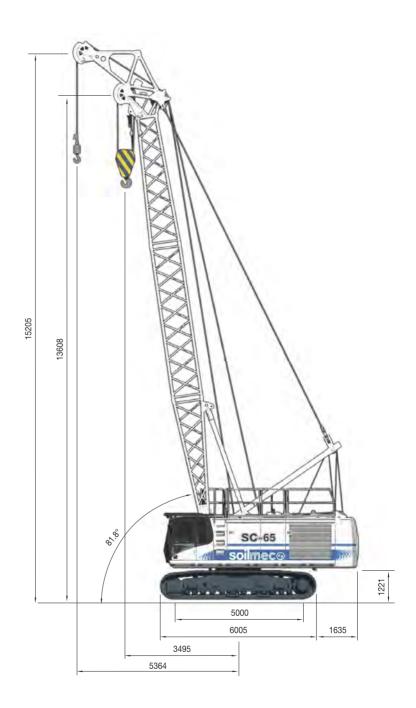
 Width
 1410 mm
 55.6 in

 Weight
 500 kg
 1102 lb

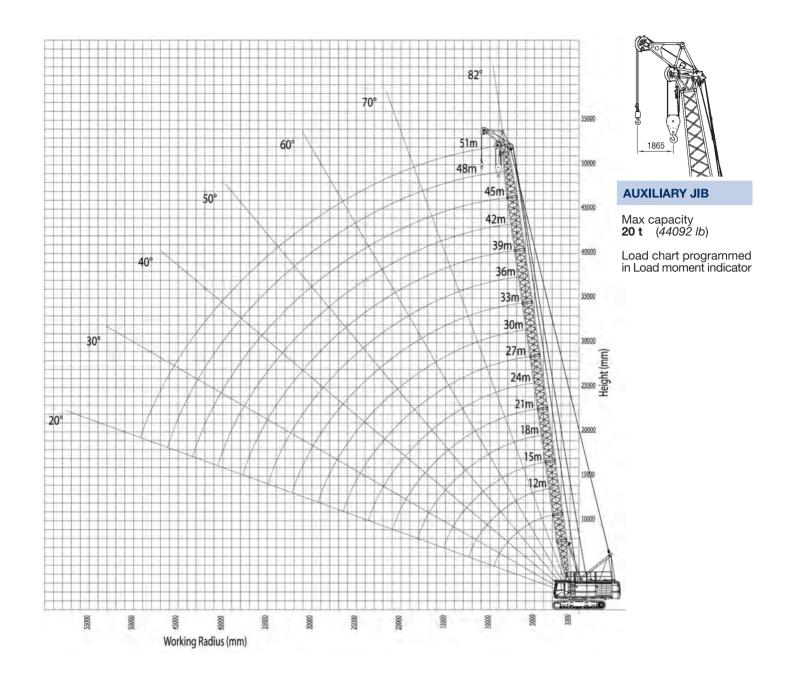








Hooks							
Туре	N° of shaves			Max r	ated load		
		1 line part	2 line parts	3 line parts	4 line parts	5 line parts	6 line parts
t US ton			t US ton		t US ton		t US ton
66 73	3	-	27 30	-	45 50	-	66 73
45 50	2	-	27 30	-	45 50	-	-
27 30	1	-	27 30	-	-	-	-



Notes

- Rated loads are in metric tons valid for 360 degrees working area.
- Lifting capacities are in compiance with DIN 15019/part 2/chart 1 and ISO 4305 and do not exceed 75% of tipping load
- Working radius are measured from the swing center of the machine.
- Rated loads are calculated with the machine on firm and level ground, without travelling
- Weights of lifting attachments (e.g.: hook, ropes, bucket, etc.) are included in the rated load: therefore their weights must be subtracted from rated load to obtain net lifting value.
- This load chart is valid if crawler frames are extended.
- Lifting capacities are based on freely suspended loads. Operator must reduce lifted loads and operating speeds in case of adverse conditions (e.g.: wind, soft ground,
- out-of-level, pendulum action, sudden load stopping, operating speeds, etc.)
- This load chart are only for reference. For actual lifting capacities please refer to load chart in operator's manual.
- Instruction in the "Operator's Manual" must be strictly observed during machine operations.
- Operations are not approved for working radius and boom lenghts that have no ratings associated on load chart

LOAD CHART

Capacity (t)

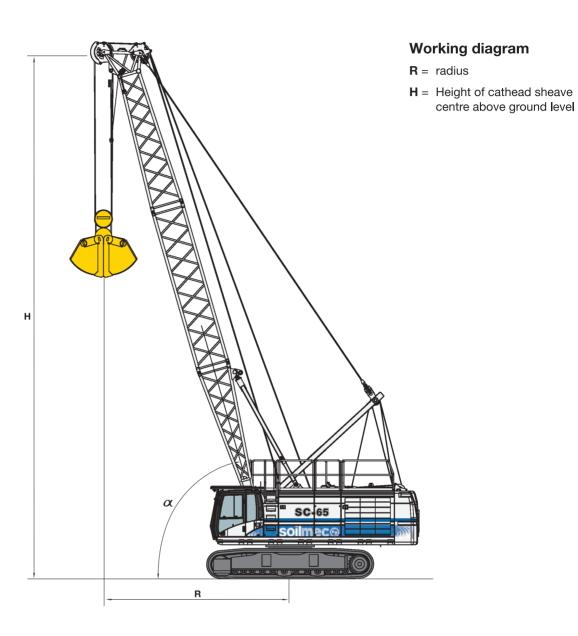
Boom Length (m)

							DOUIII LE	engtn (m)							
Radius (m)	12m	15m	18m	21m	24m	27m	30m	33m	36m	39m	42m	45m	48m	51m	Radius (m)
3,5	65,7														3,5
4,0	63,5	60,1													4,0
4,5	57,1	55,0	49,9												4,5
5,0	49,2	48,0	46,9	46,2											5,0
5,5	42,2	41,2	40,9	39,4	38,3										5,5
6,0	36,9	36,8	36,8	34,6	34,0	34,0									6,0
6,5	32,7	32,7	32,7	31,2	30,6	30,7	30,8	24,8							6,5
7,0	29,4	29,3	29,3	28,9	28,1	27,6	26,5	24,3	24,0						7,0
7,5	26,7	26,6	26,5	26,0	25,4	25,0	23,5	23,4	23,0	22,8					7,5
8,0	24,4	24,3	24,2	23,9	23,5	22,9	21,9	21,6	21,4	21,0	19,2				8,0
8,5	22,4	22,3	22,3	22,1	21,7	21,2	20,8	20,7	20,6	19,1	18,2				8,5
9,0	20,8	20,6	20,6	20,5	20,1	19,9	19,2	19,2	19,2	18,2	17,1	16,9	16,3		9,0
9,5	19,3	19,2	19,1	19,0	18,6	18,5	18,0	17,8	17,8	17,1	16,7	16,4	16,2	15,9	9,5
10,0	18,0	17,9	17,9	17,7	17,3	17,2	16,8	16,6	16,5	16,4	15,9	15,6	15,2	15,0	10,0
11,0	15,9	15,8	15,7	15,6	15,2	15,1	14,7	13,9	13,9	13,6	13,5	13,3	13,2	13,0	11,0
12,0	14,1	14,1	14,0	13,9	13,5	13,4	13,1	12,7	12,7	12,4	12,2	12,2	12,1	12,0	12,0
14,0		11,5	11,4	11,3	11,0	10,9	10,6	10,1	10,0	9,8	9,8	9,5	9,4	9,0	14,0
16,0			9,5	9,4	9,1	9,0	8,8	8,7	7,8	6,7	6,6	6,4	6,1	5,6	16,0
18,0				8,0	7,8	7,6	7,4	7,3	6,9	6,1	5,3	5,0	5,0	4,3	18,0
20,0				6,9	6,7	6,6	6,4	6,3	6,1	5,6	4,8	4,4	4,4	3,8	20,0
22,0					5,8	5,7	5,5	5,4	5,3	5,2	4,5	4,0	3,6	3,2	22,0
24,0						5,0	4,8	4,7	4,6	4,4	4,2	3,8	3,4	3,0	24,0
26,0						4,4	4,2	4,1	4,0	3,9	3,7	3,5	3,1	2,8	26,0
28,0							3,8	3,6	3,5	3,3	3,1	3,0	2,9	2,6	28,0
30,0								3,1	3,1	2,9	2,7	2,6	2,4	2,2	30,0
32,0										2,5	2,2	2,1	2,0	1,8	32,0
34,0											1,9	1,8	1,7	1,5	34,0
36,0											1,6	1,5	1,4	1,2	36,0
38,0											1,3	1,2	1,1		38,0
40,0															40,0
42,0															42,0
44,0															44,0
Part line	6	6	6	4	4	4	4	2	2	2	2	2	2	2	Part line

Boom configur	atio	า													
Туре	Le	enght						N° (of boom	extensio	ons (*)				
Boom foot	6 m	19.7 ft	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom insert	3 m	9.8 ft	1	-	1	-	1	-	1	-	1	-	1	-	1
Boom insert	6 m	19.7 ft	-	1	1	2	2	3	3	4	4	5	5	6	6
Boom head	6 m	19.7 ft	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom lenght (m)			15	18	21	24	27	30	33	36	39	42	45	48	51
Boom lenght (ft)			49.2	59.1	68.9	78.7	88.6	98.4	108.3	118.1	128	137.8	147.6	157.5	167.3

^(*) Max two boom inserts of 3m installed straight after boom foot.

CLAMSHELL EQUIPMENT



n met	ric to	n												
boom lenght (m) 12			15			18				21		24		
R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity
m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
5,9	12,9	20,2	6,9	15,7	20,1	7,9	18,6	20,0	8,9	21,4	17,8	10,0	24,2	15,3
7,8	12,0	20,0	9,3	14,6	17,2	10,8	17,2	14,8	12,3	19,8	12,1	13,8	22,4	10,3
9,5	10,8	16,9	11,4	13,1	13,6	13,3	15,4	11,0	15,3	17,7	9,3	17,2	20,0	7,8
10,9	9,4	14,4	13,2	11,3	11,2	15,5	13,2	9,0	17,8	15,1	7,3	20,1	17,1	6,2
12,1	7,6	12,5	14,7	9,1	9,6	17,3	10,6	7,6	19,9	12,1	6,2	22,5	13,6	5,2
າ pou	nd													
	39.4	!		49.2	?		59.1			68.9)		78.7	7
R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity
	R m 5,9 7,8 9,5 10,9 12,1	12 R H m m 5,9 12,9 7,8 12,0 9,5 10,8 10,9 9,4 12,1 7,6 1 pound 39.4	R H Capacity m m t 5,9 12,9 20,2 7,8 12,0 20,0 9,5 10,8 16,9 10,9 9,4 14,4 12,1 7,6 12,5 n pound 39.4	12 R H Capacity R m m t m 5,9 12,9 20,2 6,9 7,8 12,0 20,0 9,3 9,5 10,8 16,9 11,4 10,9 9,4 14,4 13,2 12,1 7,6 12,5 14,7 1 pound 39.4	12 15 R H Capacity R H m m t m m 5,9 12,9 20,2 6,9 15,7 7,8 12,0 20,0 9,3 14,6 9,5 10,8 16,9 11,4 13,1 10,9 9,4 14,4 13,2 11,3 12,1 7,6 12,5 14,7 9,1 1 pound 39.4 49.2	12 15 R H Capacity R H Capacity m m t m m t 5,9 12,9 20,2 6,9 15,7 20,1 7,8 12,0 20,0 9,3 14,6 17,2 9,5 10,8 16,9 11,4 13,1 13,6 10,9 9,4 14,4 13,2 11,3 11,2 12,1 7,6 12,5 14,7 9,1 9,6	12 15 R H Capacity R H Capacity R m m t m m t m 5,9 12,9 20,2 6,9 15,7 20,1 7,9 7,8 12,0 20,0 9,3 14,6 17,2 10,8 9,5 10,8 16,9 11,4 13,1 13,6 13,3 10,9 9,4 14,4 13,2 11,3 11,2 15,5 12,1 7,6 12,5 14,7 9,1 9,6 17,3 pound 39.4 49.2	12 15 18 R H Capacity R H Capacity R H m m t m m t m m 5,9 12,9 20,2 6,9 15,7 20,1 7,9 18,6 7,8 12,0 20,0 9,3 14,6 17,2 10,8 17,2 9,5 10,8 16,9 11,4 13,1 13,6 13,3 15,4 10,9 9,4 14,4 13,2 11,3 11,2 15,5 13,2 12,1 7,6 12,5 14,7 9,1 9,6 17,3 10,6 pound 39.4 49.2 59.1	12 15 18 R H Capacity R H Capacity R H Capacity m m t m m t m m t 5,9 12,9 20,2 6,9 15,7 20,1 7,9 18,6 20,0 7,8 12,0 20,0 9,3 14,6 17,2 10,8 17,2 14,8 9,5 10,8 16,9 11,4 13,1 13,6 13,3 15,4 11,0 10,9 9,4 14,4 13,2 11,3 11,2 15,5 13,2 9,0 12,1 7,6 12,5 14,7 9,1 9,6 17,3 10,6 7,6 T pound	12 15 18 R H Capacity R H Capacity R H Capacity R m m t m m t m m t m 5,9 12,9 20,2 6,9 15,7 20,1 7,9 18,6 20,0 8,9 7,8 12,0 20,0 9,3 14,6 17,2 10,8 17,2 14,8 12,3 9,5 10,8 16,9 11,4 13,1 13,6 13,3 15,4 11,0 15,3 10,9 9,4 14,4 13,2 11,3 11,2 15,5 13,2 9,0 17,8 12,1 7,6 12,5 14,7 9,1 9,6 17,3 10,6 7,6 19,9 n pound 39.4 49.2 59.1	12 15 18 21 R H Capacity R H Capacity R H Capacity R H m m t m m t m	12 15 18 21 R H Capacity R H Capacity R H Capacity R H Capacity m m t m m t m m t m m t 5,9 12,9 20,2 6,9 15,7 20,1 7,9 18,6 20,0 8,9 21,4 17,8 7,8 12,0 20,0 9,3 14,6 17,2 10,8 17,2 14,8 12,3 19,8 12,1 9,5 10,8 16,9 11,4 13,1 13,6 13,3 15,4 11,0 15,3 17,7 9,3 10,9 9,4 14,4 13,2 11,3 11,2 15,5 13,2 9,0 17,8 15,1 7,3 12,1 7,6 12,5 14,7 9,1 9,6 17,3 10,6 7,6 19,9 12,1 6,2 To pound	12 15 18 21 R H Capacity R H Capacity R H Capacity R m m t m m t m m t m m t m 5,9 12,9 20,2 6,9 15,7 20,1 7,9 18,6 20,0 8,9 21,4 17,8 10,0 7,8 12,0 20,0 9,3 14,6 17,2 10,8 17,2 14,8 12,3 19,8 12,1 13,8 9,5 10,8 16,9 11,4 13,1 13,6 13,3 15,4 11,0 15,3 17,7 9,3 17,2 10,9 9,4 14,4 13,2 11,3 11,2 15,5 13,2 9,0 17,8 15,1 7,3 20,1 12,1 7,6 12,5 14,7 9,1 9,6 17,3 10,6 7,6 19,9 12,1 6,2 22,5 10,0 1,0 1,0	12 15 18 21 24 R H Capacity R H 5,9 12,9 20,2 6,9 15,7 20,1 7,9 18,6 20,0 8,9 21,4 17,8 10,0 24,2 7,8 12,0 20,0 9,3 14,6 17,2 10,8 17,2 14,8 12,3 19,8 12,1 13,8 22,4 9,5 10,8 16,9 11,4 13,1 13,6 13,3 15,4 11,0 15,3 17,7 9,3 17,2 20,0 <

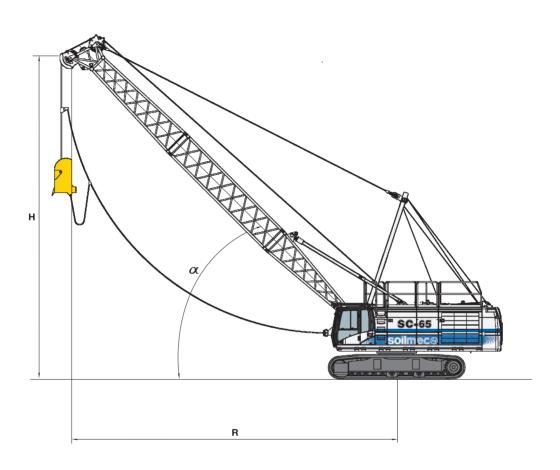
boom length (it)		39.4	+		49.2			59.1			00.8	7		/0./	
	R	Н	Capacity												
boom angle (°)	ft	ft	lb												
70	19.2	42.4	44533	22.6	51.6	44312	26.0	60.9	44092	29.3	70.1	39242	32.7	79.4	33730
60	25.4	39.5	44092	30.4	48.0	37919	35.3	56.5	32628	40.2	65.1	26676	45.1	73.6	22751
50	31.1	35.6	37258	37.4	43.1	29983	43.7	50.6	24251	50.1	58.1	20503	56.4	65.7	17196
40	35.9	30.7	31746	43.5	37.0	24692	51.0	43.4	19841	58.5	49.7	16094	66.1	56.0	13669
30	39.8	25.1	27558	48.4	30.0	21164	56.9	34.9	16755	65.4	39.8	13669	73.9	44.8	11464

DRAGLINE EQUIPMENT

Working diagram

R = radius

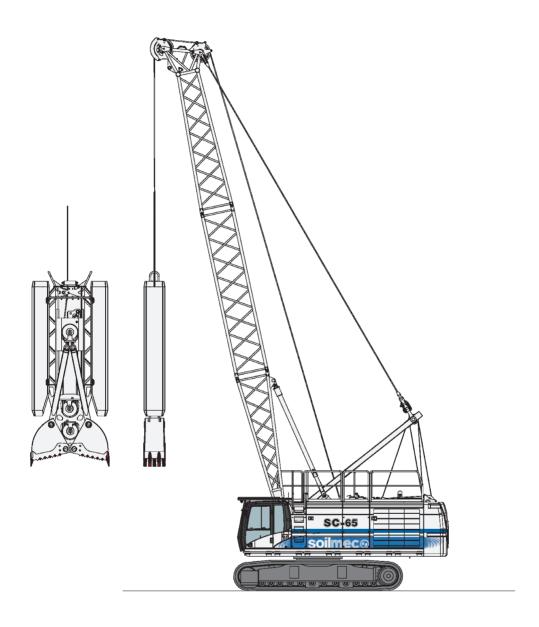
H = Height of cathead sheave centre above ground level



boom lenght (m)		12			15			18			21			24	
	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity
boom angle (°)	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
45	10,1	9,7	15,0	12,2	11,8	12,0	14,3	13,9	10,0	16,4	16,1	8,7	18,5	18,2	7,6
40	10,8	8,9	14,0	13,1	10,9	11,1	15,4	12,8	8,9	17,7	14,7	7,6	20,0	16,6	6,6
35	11,4	8,1	12,9	13,9	9,8	10,0	16,3	11,5	8,1	18,8	13,3	6,9	21,2	15,0	5,9
30	12,0	7,2	11,7	14,6	8,7	8,9	17,2	10,2	7,4	19,8	11,7	6,3	22,4	13,2	5,3

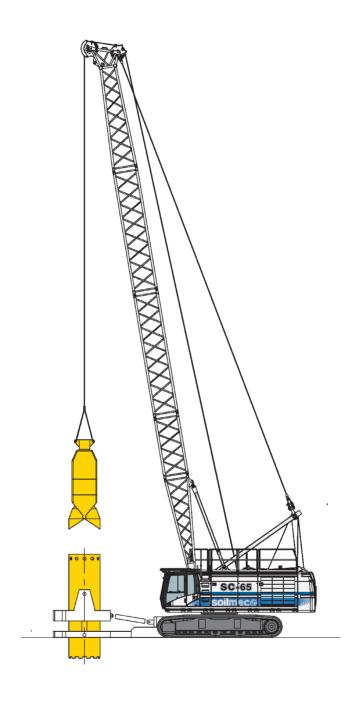
Capacitics	II pou	IIG													
boom lenght (ft)	39.4			49.2			59.1			68.9			78.7		
	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity	R	Н	Capacity
boom angle (°)	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft	ft	lb
45	33.0	31.8	33069	40.0	38.8	26455	46.9	45.7	22046	53.9	52.7	19180	60.9	59.7	16755
40	35.3	29.3	30864	42.9	35.6	24471	50.4	41.9	19621	57.9	48.3	16755	65.5	54.6	14550
35	37.4	26.6	28439	45.5	32.2	22046	53.5	37.9	17857	61.6	43.5	15212	69.7	49.1	13007
30	39.3	23.7	25794	47.8	28.6	19621	56.3	33.5	16314	64.8	38.4	13889	73.4	43.4	11684

DIAPHRAGM WALL GRAB EQUIPMENT



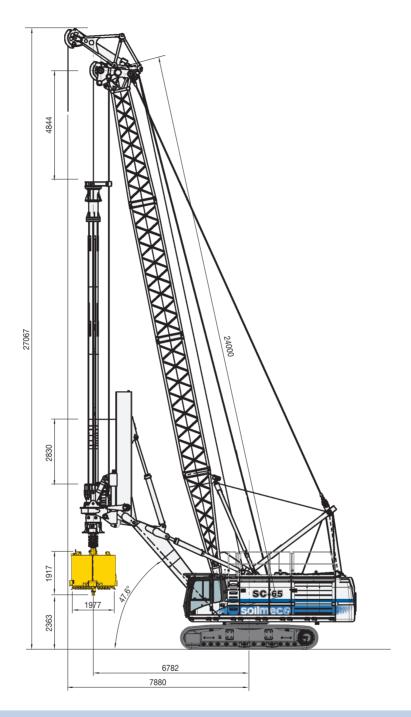
Diaphragm Wall Grab		
Winches	2 x 240 kN	2x53.955 lb _f
Max chisel weight	13 t	28.660 lb
Max allowable weight in two rope operation	22 t	48.501 lb

CASING OSCILLATOR EQUIPMENT



Casing oscillator with hammer grab		
Winches	2 x 240 kN	2x53.955 lb _f
Drilling diameter	1800 mm	71 in
Max allowable weight in two rope operation	22 t	48.501 lb

HYDRAULIC ROTARY EQUIPMENT



Drilling performance (SA-25)		
Rotary Drive - Shifting gear type		
Torque (nominal)	291 kNm	214627 lb _f ft
Speed of rotation (max)	40 rpm	40 rpm
Spinoff speed	85 rpm	85 rpm
Crowd system		
Crowd effective force	250 kNm	184387 lb _f ft
Stroke (kelly system)	2.830 mm	111.5 in
Max drilling depth	81 m	266 ft
Max diameter drilling	2.500* mm	98.5 in

^(*) The max drilling diameter value combined with max drilling depth has to be agreed with Soilmec.

OPERATIONAL COMFORT

The wide cab offers outstanding comfort and confidence to increase daily production.

To maximize visibility, all glass is fixed directly to the cab eliminating the use of window frames.

Air conditioning system.

Sound insulated cab.

One central high brightness led fixture to light up all the cab.

Two courtesy lights illuminate softly cabin controls during operator works.

ERGONOMY

The elegant and wide cabin is more than a working station.

Consoles designed to guarantee easy activation of the switches and excellent visibility.

Large springy seat and manipulator console adjustable one each other.

The new electro-proportional manipulators with illuminated (night/day) push-buttons provide fast, safe and productive operations.

The new DMS monitor gives a complete control of machine operations.

A hand throttle allows to have all machine functions on the tip of three fingers only.

SAFETY

The new Cabin shows the Falling Object Guard System which includes overhead and windshield guards.

Cab instruments are ergonomically located to ensure safety.

Winch controls and new joysticks designed to be compliant with safety standards and, in the meantime, reduce the operator fatigue.

Negative and positive free fall control systems both available.

All the working area is under control with LCD monitor of video-cameras which allows to check four quads at the same time.







DMS and CONTROL SYSTEM

The Soilmec proprietary **Control System** installed on SC-65 allows control and coordination of machine functions: movements can be performed simultaneously.

The **redundant PLC** system guarantees, in case of failure, no impact on machine availability: operator will be informed, through the touch panel display, about the specific problem.

The Control System is autodiagnosticable and related interfaces are plug&play.

The associated **DMS** (**Drilling Mate System**) consists of:

- DMS
- DMS PC
- DMS Manager

DMS standard provides:

- · warning recording
- trouble shooting helping the operator to locate the fault
- efficient maintenance management: DMS records and shows all preventive maintenance operations
- interface with Power Module Control System
- production and operation data storage on CF card or USB flash drive for their processing (with DMS PC)
- connection to modem (GPRS, EDGE or SATELLITE) to send out alarms/data to customer /Soilmec Control Center (DMS Manager) or to an e-mail address



DMS Manager

Enables full remote control of the machine operations and processing of drilling data sent by modem (wifi/satellite/GPRS)

DMS Manager allows to fully use the DMS potential for a truly comprehensive service to customer/jobsite.



Spare part online center (SPOC)

The innovative technical web site of Soilmec S.p.A. has been published with the aim to give Soilmec Dealer Network continuous updated information regarding products and equipments, for a better interaction with the Customers.

Infact, SPOC offers the following online features:

- consultation and downloading of machine documentation, e.g. user and maintenance manuals, electrical/hydraulic drawings, DMS manuas, technicla documentation, etc.
- placement and management of purchase orders for spare parts
- real time availability of components of spare parts



WORKING TOOLS















SOILMEC distributes machinery and structures all over the world, supported by SOILMEC subsidiary companies and dealers. The complete Soilmec network list is available on the webpage www.soilmec.it

